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Sheet 1 of 4

**Complete if Known**

Application Number	09/868,664
Filing Date	September 26, 2001
First Named Inventor	Bell
Art Unit	2121
Examiner Name	Nichols
Attorney Docket Number	05222.00161

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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	1	WO 00/04478	01/27/00	Jonsson		

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
P.C./	2	"A Browser-Based System to Support & Deliver DE," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 1, Nov. 4-7, 1998	
	3	"A Fuzzy Logic-Based Intelligent Tutoring System," Information Processing 92, Vol. II, pp. 66-72, Dec. 1992.	
	4	"A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 307-314, Aug. 1995	
	5	"A Role for AI in Education: Using Technology to Reshape Education", Northwestern University, The Institute for the Learning Sciences, Journal of Artificial Intelligence in Education, Winter 1990, January 1990, pp. 1-24 and 2 pgs. of references	
	6	"A Special Section -- Goal Based Scenarios: A New Approach to Professional Education: Reengineering Education at Andersen Consulting," Educational Technology, Nov.-Dec. 1994	
	7	"An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, Sep. 1997.	
	8	"An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 592-94, Dec. 1997	
	9	"Architecture of an Intelligent Tutoring System on the WWW," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 39-46 Dec. 1997	
	10	"Artificial Intelligence and Mathematics Education" at <a href="http://www.rand.org/hot/mcarthur/Papers/aied.html">http://www.rand.org/hot/mcarthur/Papers/aied.html</a>	1/01
	11	"Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at <a href="http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html">http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html</a>	7/01
	12	"Automate Your Business Plan" at <a href="http://www.business-plan.com/screen2.html">www.business-plan.com/screen2.html</a>	7/01
	13	"Automated Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24(6), pp. 863-74, June 1994	
	14	"Automated Training of Legal Reasoning" at <a href="http://www.bileta.ac.uk/94papers/muntjew.html">http://www.bileta.ac.uk/94papers/muntjew.html</a>	4/94
	15	"BrainMaker Neural Network Application Examples" at <a href="http://www.calsci.com/Applications.html">www.calsci.com/Applications.html</a>	1/01
	16	"Brainmaker" at <a href="http://www.npiec.on.ca/~echoscan/28-04.htm">www.npiec.on.ca/~echoscan/28-04.htm</a>	7/01
	17	"Bridging the Virtual and the Physical: The InterSim as a Collaborative Support Interface," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 556-58, Dec. 1997	
V	18	"CAPTOR a model for delivering web based intelligent tutoring system technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5	2/00



OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/P.C./	19	"Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14.	11/95
	20	"Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, Nov.-Dec. 1994	
	21	"DDD--A Free Graphical Front-End for UNIX Debuggers," Jan. 1996, ACM Sigplan Notices, Vol. 31, No. 1, pp. 22-27	
	22	"Decision Pro3.0" at www.vanguardsw.com/	
	23	"Developing a Design System into an Intelligent Tutoring System," Int'l J. Engr. Eud., Vol. 13(5), 341-46, Dec. 1997	
	24	"Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," Jan. 1994, IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-17.	
	25	"Development of an Integrated Simulator and Real Time Plant Information System," Advances in Operational Safety of Nuclear Power Plants, Proceedings of an International Symposium 1996, pp. 543-549.	
	26	"Distributed Intelligent Tutoring on the Web," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 482-89, Dec. 1997	
	27	"Eight Goal-Based Scenario Tools", Technical Report # 67, Northwestern University, The Institute for the Learning Sciences, January 1996, pp. 1-37	
	28	"Embedding an Intelligent Tutoring System in a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994	
	29	"Engines for Education" URL: http://www.ils.nwu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html; viewed Feb. 15, 1999.	
	30	"Enhancing Simulation Education with Intelligent Tutoring Systems," Proc. Of the 1996 Winter Simulation Conf., pp. 675-80, Dec. 1996	
	31	"Evaluating Intelligent Tutoring with Gaming Simulations," Proc. Of the 1995 Winter Simulation Conf., pp. 1376-83, Dec. 1995	
	32	"Evaluating the effectiveness of feedback in SQL-tutor", IEEE, proc. Int. workshop IWALT, pp 143-144	2000
	33	"FRA: Teaching Financial Accounting with a Goal-Based Scenario," Intelligent Systems in Accounting, Finance and Management, Vol. 4, 1995	
	34	"From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, V. 2(3), pp. 39-50, Dec. 1997	
	35	"Goal-Based Scenarios and Business Training: A Conversation with Roger C. Schank," Educational Technology, Nov.-Dec. 1994	
	36	"Goal-Based Scenarios and the Problem of Situated Learning: A Commentary on Andersen Consulting's Design of Goal-Based Scenarios," Educational Technology, Nov.-Dec. 1994	
	37	"Goal-Based Scenarios", Technical Report # 36, Northwestern University, The Institute for the Learning Sciences, December 1992, pp. 1-30	
	38	"Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," Jan. 1989, IEEE Inc., New York, Vol. 49, No. 1, pp. 40-57.	
	39	"Intelligent Tutoring Systems: An Overview" at http://www.intellectbooks.com/authors/lawler/its.htm	
	40	"Interactive Multimedia Instructs the Individual," Oct. 1994, Occupational Health & Safety Vol. 63, No. 10, pp. 144-145	
	41	"Interface design issue for advice-giving expert systems", Comm. Of the ACM, vol 30, no. 1, pp14-31	1/87
	42	"KBLPS Overview" at www.cgi.com/CGIWEB/KBLPS/overindex4.html	7/99
	43	"Kiplinger TaxCut Press Releases" at http://www.taxcut.com/taxcut/98press_releases/pr98_nowshipping.html	12/98
	44	"Learning with Computers," May 1994, Accountancy Vol. 113, No. 1209, pp. 60-64	

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## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

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/P.C./	45	"Microworlds and Simuworlds: Practice Fields for the Learning Organization," Spring 1996, Organizational Dynamics Vol. 24, No. 4, pp. 36-49	
	46	"MUSE U.S. Patents" OCCAM Research Corporation, at www.muser.com/html/patents.html	
	47	"News for ESAP" at www.hops.wharton.upenn.edu/~esap/news.html	
	48	"No More Boring CPE," July 1997, Accounting Technology, pp. 27-35	
	49	"Object Lens: A "Spreadsheet" for Cooperative Work", ACM Transactions on Information Systems 1988 at www.acm.org/pubs/toc/Abstracts/tois/59298.html	
	50	"Pedagogical, natural language and knowledge engineering techniques in SOPHIE I, II, and III," in Intelligent Tutoring Systems, D. Sleeman & J.S. Brown eds., pp. 227-82, Dec. 1982	
	51	"Persistent Issues in the Application of Virtual Environment Systems to Training," August 1996, Proceedings. Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32.	
	52	"Popular Theory Supporting the Use of Computer Simulation for Experiential Learning," http://www.centurionsys.com/rcl57.html, Aug. 1997	
	53	"Practical methods for automatically generating typed links", ACM Hypertext, pp 31-41	3/98
	54	"Projects: FinPlan System" at www.rrai.org.ru/FinPlan/	7/01
	55	"RadTutor: The Theoretical and Empirical Basis for the Design of a Mammography Interpretation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 386-393 Dec. 1997	
	56	"Rule-Based Programming with OPS5" at www.mkp.com/books_catalog/O-934613-51-6.asp	1988
	57	"Simulation Technology and Parallelism in Learning Environments" at http://www.to.utwente.nl/prj/min/Book/chapter1.htm	7/01
	58	"Smart Avatars in JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-63	
	59	"SMART Evaluation: Cognitive Diagnosis, Mastery Learning & Remediation," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 123-130, Aug. 1995	
	60	"Smartlaw: adapting classic expert system techniques for the legal research domain", ACM pp 133-141	1993
	61	"Socialized Collaborative Learning in Multimedia Virtual Worlds" URL: http://www.iscs.nus.edu.sg/labs/learning/els/VRLML.html; viewed Feb. 16, 1999	
	62	"Task-Oriented Learning on the Web"; Innovations in Education and Training International, Vol. 36, No. 1, Feb. 1999	
	63	"Teaching Real-World Analysis Skills for Goal-Based Scenario," pp. 68-74	7/01
	64	"Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 111-18 Dec. 1997	
	65	"Teaching with the internet" 1998, JAI Press Inc., USA. Vol no. 3, pp 217-222	
	66	"Technical Report: Computer Aided Education and Training Initiative" at http://advlearn.lrdc.pitt.edu/advlearn/papers/FINALREP.html	1/98
	67	"Developing a WFT Workflow System", Workflow Template, Chapter 8, 1998, pp. 8-1/8-23	
	68	"The Design of Goal-Based Scenarios", Technical Report # 39, Northwestern University, The Institute for the Learning Sciences, March 1993, pp. 1-58	
	69	"The Lisp Tutor," Byte, pp. 159-75, Apr. 1985	
	70	"The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at http://www.nib.unicamp.br/recursos...education/intelligent-tutoring.html	1993
	71	"The SimQuest Authoring System for Simulation-Based Discovery Learning," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997	
	72	"The Virtual Learning Environment System," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 2, Nov. 4-7, 1998	
	73	"Train with Less Pain," Oct. 13, 1997, Informationweek No. 652, pp. 150-154	

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/P.C./	74	"TurboTax Deluxe Product Information" at <a href="http://www.intuit.com/turbotax/prodinfo/ttdlx.html">http://www.intuit.com/turbotax/prodinfo/ttdlx.html</a>	1/01
	75	"Understanding Organizational Dynamics of IT-Enabled Change: A Multipedia Simulation Approach," Winter 1997/1998, Journal of Mangement Information Systems: JMIS, Vol. 14, No. 3, pp. 109-140.	
	76	"User-Sensitive Multimedia Presentation System," IBM Technical Disclosure Bulletin, March 1, 1996, Vol. 39, No. 3, pp. 93-94	
	77	"Using Planning Techniques to Provide Feedback in Interactive Learning Environments," Proc. Sixth Int'l Conf. On Tools with Artificial Intelligence," pp. 700-03, Nov. 1994	
	78	"Using the Wizard of Oz Technique to Prototype a Scenario-Based Simulation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 458-65, Dec. 1997	
	79	"Virtual Learning: A Revolutionary Approach to Building a Highly Skilled Workforce," Autumn 1998, Personnel Psychology Vol. 51, No. 3, pp. 767-71	
	80	"What are Intelligent Coaching Systems and Why are they (in)evitable?" IEEE Colloquium on Artificial Intelligence in Educational Software, pp. 2/1-2/5, June 1998	
	81	"Why Should the Teens Have All the Best Games? Management Skill with Oil, Health, Housing Games," Computergram Int'l, June 176, 1996	
	82	"WITS: A Reusable Architecture for a VR-Based ITS" at <a href="http://advlearn.lrdc.pitt.edu/its-arch/papers/tam.html">http://advlearn.lrdc.pitt.edu/its-arch/papers/tam.html</a>	6/96
	83	"Computer Dictionary", 1997, Microsoft Press, 3 <sup>rd</sup> Ed., pp. 264, 276, 383, 446, 462, 507.	
	84	"Flexible Learning", Feb. 1998, Credit Union Management Vol. 21, No. 2, pp. 32-33+	
	85	"The Prototype of the Virtual Classroom", Interactive Multimedia Distance Learning (IMDL): NLII Viewpoint, Fall/Winter 1997	
	86	"Multimedia Training... Get Lemonade, Not a Lemon!" June 1997, Journal for Quality and Participation vol. 20, No. 3, pp. 22-26	
	87	"The Virtual Classroom: Great Expectations. Delivering Graduate Education by Computer: A Success Story", 1996.	

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